



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/695,140	10/25/2000	Rinya Takesue	Q61468	3589
7590 12/31/2003 Sughrue Mion Zinn MacPeak & Seas PLLC 2100 Pennsylvania Avenue N W Washington, DC 20037-3213			EXAMINER BUTTNER, DAVID J	
			ART UNIT 1712	PAPER NUMBER

DATE MAILED: 12/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/695,140

Applicant(s)

TAKESUE ET AL.

Examiner

David Buttner

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 12-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-16, 18-24 is/are rejected.
- 7) ☒ Claim(s) 17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other:  |

Claims 12, 13, 15, 16, 18 and 22-24 rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over the Statz 2002/0091188 publication.

Statz claims (#8) blends of E/acid or E/acid/acrylate copolymer, an organic acid, thermoplastic Elastomer and cation source as cores or mantles or one-piece golf balls. Examples 10a, 10b and 10c use stearic acid and magnesium hydroxide in amounts corresponding to applicant's claims and with the appropriate melt index. The acid copolymer may also be partially neutralized beforehand (paragraph 46). Note that applicant's blend of un-neutralized E/acid +neutralized E/acid is equivalent to a lower neutralized E/acid. Application 9/422142 filed 10/21/99 has basis for these limitation. The provisional applications have not been reviewed. Statz '571 (Col 4 line 57-69) can be cited for a discussion of metal lability in ionomers.

Claims 12, 13, 15, 16 and 18-24 rejected under 35 U.S.C. 103(a) as being unpatentable over the Statz 2002/0091188 publication in view of Sullivan '831.

Statz does not list applicant's preferred inorganic cation sources (c), although any source (paragraph 46) is usable.

Sullivan (table 4) lists a number of cation sources for neutralizing ionomers. It would have been obvious to use NaOH, MgO etc. to supply the metal ions called for by Statz.

Claims 12-15, 22 and 23 rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over the Chen '321 Patent.

Chen adds stearic acid or metal stearates to ethylene/acid/acrylate ionomers to form golf ball cores, mantles, covers or one-piece balls. This is the same final product as produced by applicant's "post neutralization" process of adding (c) subsequently or simultaneously to the combination of (a) and (b). In effect, Chen "preblended" applicants (a) and (c) prior to adding (b). The alternative processes would be expected to produce equivalent products if the same overall amounts are used of each component.

Claims 12-15, 22 and 23 rejected under 35 U.S.C. 103(a) as being unpatentable over the Chen '321 Patent in view of the Statz 2002/0091188 publication.

Chen neutralizes the terpolymer prior to adding the fatty acid, rather than neutralizing subsequently or simultaneously with combining the E/acrylate/acid terpolymer and fatty acid.

This "post neutralization" is known to ease processability (see paragraph 48 of the Statz publication). This is because the melt index of the terpolymer decreases upon neutralization. It would have been obvious to first combine the terpolymer and processability improving fatty acid, rather than add preneutralized ionomer to the fatty acid for the expected advantages.

Claims 12-15, 19, 20, 22 and 23 rejected under 35 U.S.C. 103(a) as being unpatentable over the Chen '321 Patent in view of Statz 2002/0091188 in further view of Sullivan '831.

Chen/Statz do not list applicant's preferred metal supplying compounds (c).

Sullivan (table 4) shown conventional metal compounds used to neutralize ionomers. It would have been obvious to use any of these metal compounds to neutralize Chen's ionomers.

Claim 17 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Chen does not disclose wound balls and Statz does not suggest the material as the outer cover

Applicant's arguments filed 7/18/03 have been fully considered but they are not persuasive.

Applicant argues "consisting essentially of" excludes the thermoplastic elastomers of Statz.

Applicant also calls for thermoplastic elastomers (page 13 line 4). Applicant's specification must be consulted to determine what "consisting essentially of" excludes (In re Herz and Willis 190 USPQ 461). Applicant cannot now insist thermoplastic elastomers negatively affect the claimed invention

Applicant argues both Statz and Chen include large amount of Filler such as ZnO excluded by applicant's 0.1-10% limitation of (c).

This is not convincing. The 0.1–10% limitation is directed to metal compounds capable of neutralizing the acid groups of (A) and (B)-not all metal compounds. Both Statz (paragraph 53) and Chen (Col 6 line 49-53) indicate their ZnO is inert filler that does not react with the free acid present. These fillers (e.g. ZnO) do not qualify or applicant's (c) and therefore is not limited to low amounts

Applicant argues Chen's metal stearate does not qualify as the inorganic metal compound (c) of applicant's claims.

The metal stearate qualifies as the fatty acid derivative (B) of applicant's claims. The inorganic metal compound (C) was used to neutralize the ethylene / acrylate / acid terpolymer. In effect, Chen preblended applicant's olefin / carboxylate / carboxylic acid (A) with a cation supplying compound (C). Then, metal stearate (applicant's B) is added. Although the order of mixing is different, the same final product would be expected to result because Chen / applicant utilize the same ingredients.

The terminal disclaimer removes the obviousness double patenting.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 1712

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Buttner whose telephone number is 571-272-1084. The examiner can normally be reached on weekdays from 10am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

DAVID J. BUTTNER  
PRIMARY EXAMINER

D. Buttner/lap  
December 8, 2003

